

Taxonomic Placement of *Coralliophila incompta* BERRY, 1960, With the Proposal of a New Genus, *Attiliosa*

(Gastropoda : Muricacea)

BY

WILLIAM K. EMERSON

Department of Living Invertebrates, American Museum of Natural History
Seventy-ninth Street and Central Park West, New York, New York 10024

(Plate 53; 5 Text figures)

DURING THE PROCESS of sorting the mollusks obtained by the Puritan-American Museum Expedition to western Mexico of 1957, two specimens of an apparently new species of stenoglossid gastropod were found in a dredge sample from off Isla Angel de la Guarda. The conchological and opercular characters of these specimens suggested to us at the time taxonomic placement near the genus *Cantharus*, in the Buccinidae. These specimens, along with other unidentified material from this vast collection, were set aside for future study. Shortly thereafter, *Coralliophila incompta* was described by BERRY (1960) from specimens that also were dredged off Isla Angel de la Guarda, in the Gulf of California. The Puritan specimens, together with additional specimens in our collection taken by Mexican fishermen operating out of Guaymas, Sonora, are conspecific with BERRY's taxon for which only an abbreviated diagnosis, lacking an illustration, has been published. The holotype of BERRY's taxon is figured herein, courtesy of Dr. James H. McLean.

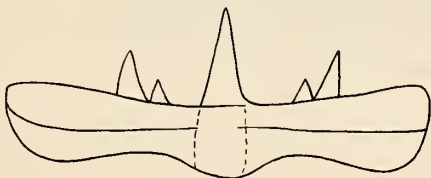


Figure 1

Radular rachidian tooth of *Cronia amygdala* (KIENER), type species of *Cronia* H. & A. ADAMS; greatly enlarged, dorsal view, after COOKE (1919, fig. 33).

My colleague, Anthony D'Attilio, who is an ardent student of the Magilidae, recently expressed his opinion that BERRY's *incompta* was not referable to the genus *Coralliophila*. Mr. D'Attilio submitted three live-taken specimens to Mr. Masao Azuma of Nishinomiya, Japan, who kindly provided us with a description and drawing of the radulae that he extracted from the specimens. Inasmuch as the shell of *incompta* is not characteristic of *Coralliophila* and a radula is not known to occur in the Magilidae [Coralliophilidae], the placement of BER-

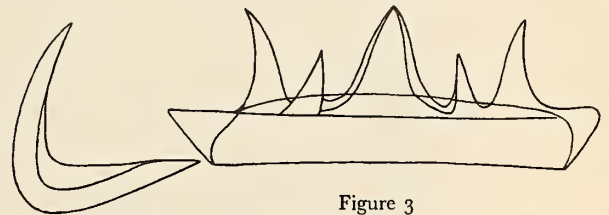


Figure 2

Figure 3

Figures 2, 3

Radular teeth of *Attiliosa incompta* (BERRY), type species of *Attiliosa*, new genus; greatly enlarged, dorsal view.

Figure 2: Lateral tooth. Figure 3: Rachidian tooth
(Drawings courtesy of Mr. Azuma)

RY's taxon in that family would appear to be untenable. The radula was found to be similar to those possessed by species in the genus *Cronia* H. & A. ADAMS (1853) of the muricacid subfamily Thaisinae (see Text Figures 2 and 3). The type species of *Cronia* is *Purpura amygdala* KIENER (1836), by monotypy (see Text Figure 1).

The placement of "*Coralliophila incompta* BERRY in the subfamily Thaisinae near the genus *Cronia*, necessitates the proposal of a new generic name:

Attiliosa EMERSON, new genus

Diagnosis: A thaisinid with a semi-ovate shell of moderate size; spire acuminated; aperture large with spiral lirations within the outer lip, and with small lirations anteriorly placed on the inner lip; anterior canal relatively long; base with siphonal fasciole. Radula with 3 major and 2 lesser cusps on central teeth (Text Figure 3). Operculum "purpuroid," *i. e.* with a lateral nucleus and a prominent marginal inner callus (Text Figures 4 and 5).

Type Species: *Attiliosa incompta* (BERRY, 1960).

Remarks: The type species of *Attiliosa* is characterized by the possession of prominent lirations within the aperture on the outer lip, by the development of a broad siphonal fasciole, and by having an extended, somewhat recurved siphonal canal.

It is my pleasure to name this new taxon in honor of my valued friend, Mr. Anthony D'Attilio.

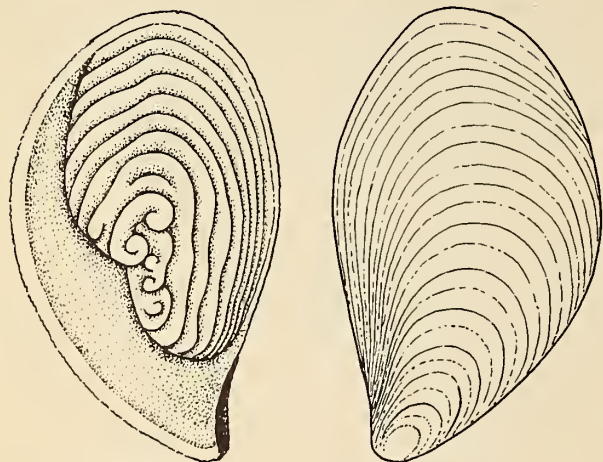


Figure 4

Figure 5

Figures 4, 5

Operculum of *Attiliosa incompta* (BERRY); greatly enlarged.
Figure 4: Inner surface. Figure 5: Outer surface.

Attiliosa incompta (BERRY, 1960)

(Plate 53, Figures 1 - 5; Text Figures 2 - 5)

Coralliophila incompta BERRY, 1960, pp. 119 - 120; type locality: "20 mi. off Puerto Refugio, Isla Angel de la Guarda, Baja California," Mexico; B. W. Walker, 20 to 21 Apr. 1953; holotype here illustrated, Plate 53, Figure 1. DUSHANE & POORMAN, 1967, p. 429, Guaymas, Sonora, Mexico, dredged in 10 - 45 fathoms, on rock and gravel bottom.

Additional Records: Off southeast end of Isla Angel de la Guarda, Mexico, 29° 01' 00" N, 113° 07' 00" W, dredged in 15 - 17 fathoms, on sand? bottom, 1 live-taken specimen, May 20, 1957 (Puritan expedition, station 167; EMERSON, 1958), A. M. N. H. No. 77128.

Off southeast end of Angel de la Guarda Island, Mexico, 29° 01' 30" N, 113° 07' 20" W, dredged in 16 to 17 fathoms, on sand?, 1 live-taken specimen, May 20, 1957 (Puritan expedition station 168; EMERSON, 1958), A. M. N. H. No. 77143.

Gulf of California, Mexico, trawled by fishermen, cruising out of Guaymas, Sonora, 6 live-taken specimens, ex. Purdy collection, A. M. N. H. No. 138277; 4 specimens, Germer collection.

Holotype deposited in Stanford University Paleontology Type Collection No. 9512; *ex* collection of S. S. Berry, No. 18768.

ACKNOWLEDGMENTS

In addition to Messrs. Azuma and D'Attilio, I am greatly indebted to the following individuals for courtesies of various kinds: Mrs. Helen DuShane of Whittier, California, Mrs. John Germer of Maywood, New Jersey, Dr. James H. McLean of the Los Angeles County Museum of Natural History, Mr. and Mrs. Ben Purdy of San Diego, California, and Mr. William E. Old, Jr. of the American Museum of Natural History.

Mr. A. A. Olsson of Coral Gables, Florida kindly read the manuscript.

Explanation of Plate 53

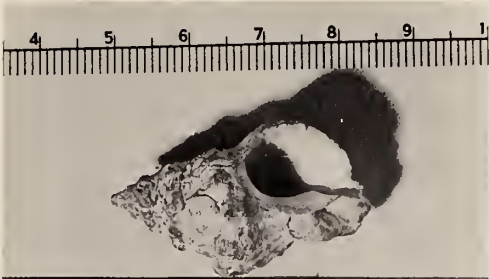
Attiliosa incompta (BERRY, 1960)

Figure 1: Holotype (x 1)

Figure 2: Mature specimen from Puritan Station 167 (American Museum of Natural History No. 77128); (x 2)

Figure 3: Juvenile specimen, with immature lip, Gulf of California (American Museum of Natural History No. 138277); (x 2)

Figures 4, 5: Mature specimen from Puritan Station 168 (American Museum of Natural History No. 77143); (x 2). Note prominent siphonal fasciole and lirations extending within the aperture in Figure 4. Exterior of shell largely covered with foreign matter in Figure 5.



No. 9512..... Holotype
Coralliophila incompta.....
Berry.....
 Formation..... Age. Recent.....
 Locality Off Puerto Refugio 20 mi
 Angel de la Guarda I., Gulf of
 California
 Stanford Univ. Paleo. Type Coll.



Figure 1

Figure 2

Figure 3



Figure 4

Figure 5